



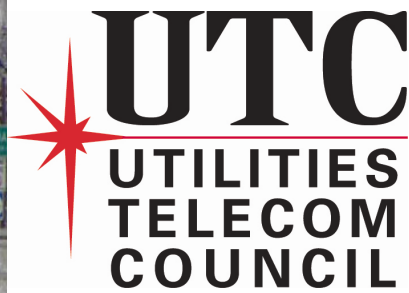
POLE ATTACHMENTS:



THE PROBLEM WITH



A WHITE PAPER BY



Introduction and Overview

Survey Respondents

This whitepaper offers a statistical analysis of the current state of joint use and pole attachment regulation. It is based on a survey conducted in the summer of 2007 by the Utilities Telecom Council. The survey was sent to all kinds of utilities, including investor-owned, municipal and cooperatively organized utilities. There were 85 responses to the survey, including 64 by investor owned utilities, 11 by cooperative utilities, and 10 by municipal utilities. In the U.S., there are approximately 1000 electric cooperatives, 70 investor-owned utilities, and 2000 municipal utilities. As such, a substantial segment of investor-owned utilities – which are generally subject to state or federal pole attachment regulation – did respond to the survey, although the number of cooperative and municipal utilities was relatively low as an overall percentage of their overall segments, respectively. These utilities own a combined total of 40,743,537 distribution poles, investor-owned making up the vast majority (38,963,393). Most utilities (70) reported that they have joint use agreements with ILECs, and some (17) reported that they have jointly owned poles.

Joint Use

Joint use poles, as the name indicates, are poles that are either owned by ILECs or electric utilities and that they share with each other according to joint use agreements. The fundamental premise behind joint use is to avoid duplication of facilities, and the joint use agreements usually contain percentage of ownership clauses, which form the basis for the relative percentage of the costs that are shared. The joint use agreements are mutually negotiated contracts that tend to be long term contracts.

Regulated Attachments

Unlike ILEC attachments that are negotiated under joint use agreements, pole attachments by cable television (CATV) operators and competitive telecommunications carriers (e.g. CLECs) are regulated under FCC or state jurisdiction, and CATV operators and CLECs are entitled to non-discriminatory access at regulated rates from certain regulated utilities (i.e. investor-owned electric utilities and telephone utilities) that own or control poles, ducts, conduit and right of way for wire communications.¹ Under the FCC rules, CATV attachments are subject to a lower rental rate using a formula based upon the costs associated with the one-foot of space on the pole that is presumptively occupied by the CATV attachment. The regulated rate for CLEC attachments is higher because it is based on two thirds of the fully allocated costs associated with the rest of the pole (i.e. the unusable space), as well as the one foot of space occupied by the CLEC attachment.

¹ Municipal utilities and cooperative utilities are excluded from FCC pole attachment jurisdiction. States may regulate pole attachments by municipal and cooperative utilities, even though the FCC does not.

In addition to wireline attachments, the FCC regulates wireless attachments, as well. The FCC has not established a rate formula for wireless attachments, but it has clarified that the rate must be cost-based.

Process

Although the fundamental premise behind pole attachments is basic in principle, the process of making and maintaining pole attachments is complex in practice. Making an attachment involves an engineering analysis, field survey and coordinating with other attaching entities that are on the pole. Maintaining the pole involves inspections and audits. Considering all the entities involved and all the attachments that are made, the process gets much more complicated than it would appear at first glance. This report will attempt to explain this process in more detail to develop a better appreciation of its complexity.

Access and Engineering Standards

The Pole Attachment Act grants utilities the discretion to deny access on a non-discriminatory basis for reasons of safety, reliability, capacity and generally accepted engineering practices. The National Electric Safety Code (NESC) sets the basic engineering standards for pole attachments, and utilities also supplement the NESC with their own standards for safety and reliability. As such, utilities may deny access to the extent an attachment would violate the NESC or their own standards for safety and reliability. The NESC is subject to interpretation and utilities reported in the survey that there have been disputes over its interpretation.

When an entity requests access for pole attachments, the utility will review the application and determine loading and capacity on the poles. If there is insufficient capacity or the pole is fully loaded, utilities may decide that “make ready” is necessary to accommodate the request for access. Examples of make ready include guying and changing out the pole.

Overlashing, Boxing and Extension Arms

Practices such as overlashing, boxing and extension arms are ways of avoiding make ready in order to accommodate pole attachments. Overlashing, as the name implies, refers to the practice of making an attachment over an existing attachment. Boxing refers to the practice of making attachments on both sides of the pole (i.e. across from each other). Finally, extension arms can be used to provide lateral clearance between attachments, when vertical clearance on the pole itself is unavailable.

Enforcement Authority

The Pole Attachment Act grants the FCC the authority to review pole attachment complaints to ensure that pole attachment rates, terms and conditions are “just and reasonable.” Although these complaint proceedings are adjudicatory in nature, they

have the practical effect of rules to the extent that the complaint case sets a precedent for others to follow. The FCC has broadly interpreted its authority to extend to pole attachment practices, including the reasonableness of utility engineering standards.

USTA and Fibertech Petitions; Time Warner Telecom Whitepaper

As part of a Notice of Proposed Rulemaking on pole attachments (WC Docket No. 07-245) the FCC is considering two petitions for rulemaking and a related whitepaper regarding pole attachments. The first petition by the Utilities States Telecom Association seeks regulated rates for ILEC pole attachments. The second petition by Fibertech Networks, LLC proposes so-called “best practices for pole attachments.” Finally, the whitepaper by Time Warner Telecom argues for discounted rates for telecom attachments that also provide video services.

Conclusions

This whitepaper counters the petitions by USTA and Fibertech, as well as the whitepaper by Time Warner Telecom, which portray an obscured and misleading picture of pole attachments. The intent of this whitepaper is to provide a statistical analysis of the state of joint use and pole attachment regulation, and to provide context so that regulators have a complete picture of pole attachments, rather than just one side of the story.

This whitepaper makes the following conclusions based upon the data in the survey:

- Electric utilities own the majority of joint use poles and their share is increasing; relatively few electric utilities jointly own poles with ILECs.
- Most attachments are cable television attachments, and there are relatively few CLEC attachments, let alone wireless telecommunications or broadband attachments.
- Electric utilities require permits for pole attachments and most utilities reported that the percentage of pole attachments permitted over the last twelve months has increased, some by 200% or more.
- Many electric utilities reported that they always approve or deny pole attachment applications within 45 days, but as an average overall almost 19% of all applications take more than 45 days to approve/deny. In those cases, electric utilities reported the following reasons why it took longer than 45 days:
 - 30.3% = size of the project
 - 8.5% = survey/inspection
 - 0.3 % = type of attachment
 - 23.4% = errors in the application
 - 28.4% = volume of applications (i.e. backlog)
 - 9.9% = other factors

- Electric utilities reported that approx. 70% of all pole attachment requests are approved after engineering review (i.e. ok to attach).
- Make ready usually takes less than 60 days, but often takes 60-90 days to complete; and utilities reported that they spent almost \$300,000 on average on make ready construction during the past year.
- Almost all utilities reported that they do not generally permit boxing and extension arms, and that they are only permitted in limited circumstances. They also generally require notice of overloading and they conduct post-construction inspection of overloading, if they are notified.
- Utilities do allow attachers to overload and make service drops without a permit, but they generally do require that attachers at least provide notice after the attachments are made. However, many utilities reported that attachers fail to notify them about overloading or service drops, even after the attachments are made.
- Almost all utilities conduct field survey to determine pole counts, and many conduct field surveys to determine code violations. Typically, utilities conduct either “system ride-outs” (i.e. review of one attacher’s attachments) or “whole pole inventories” (surveys of all the attachments on the pole) – one or the other but not both. Attachers are usually invited to participate in these surveys and utilities reported varying degrees of actual participation by attaching entities. In any event, most utilities do provide attachers with the results of the survey after it is conducted.
- Electric utilities reported that they are finding more than 13% of all attachments are in violation of code, and more than 11% of all attachments are unauthorized.
- Electric utilities reported that most poles in metropolitan areas have 3 or fewer attachments. On average, utilities reported that 76% of their joint use poles in metro areas had fewer than three attachments.
- Electric utilities calculated that their overall cost recovery from pole attachments to joint use poles is currently 16.03% percent. However, that figure would drop to 12.92% if ILECs received the telecom rate, and it would drop to 8.91% if ILECs received the CATV rate. Finally, electric utilities calculated that cost recovery would drop to 11.94% if CLECs that offered video services received the CATV rate.

These conclusions paint an overall picture of a system that is under stress. Electric utilities own more poles, are processing more applications, and have more attachments on their poles. At the same time, they are generally processing applications on a timely basis, despite issues with applications that cause utilities to take more than 45 days to process requests. The process of approval is complex -- involving field surveys, pre-construction inspections, and possibly make ready. In fact, almost 25 percent of attachments requests require some type of make ready, which usually takes 60-90 days to complete and can be expensive. Hence, attachers

prefer to avoid the associated costs and delays of make ready by employing practices such as boxing and extension arms.

Utilities recognize that speed to market and cost is important for attachers, and they do accommodate attachers by allowing them to provide notice after the fact of service drops and overloading. But, they cannot afford to compromise the safety and reliability of their own infrastructure, as well as public safety at large. Hence, they do generally require licenses for all pole attachments, and they do require that attachments are made in compliance with the NESC as well as other utility/state/federal standards.

Unfortunately, utilities are finding that a significant percentage of attachments are unauthorized and are in violation of code. In order to police their poles, utilities conduct field surveys usually every five years to determine actual pole counts and to discover code violations. Utilities invite attachers to participate in these surveys, but few actually participate. In any event, utilities provide attachers with the results of these surveys when they are conducted. These are usually disputed by attachers, and many utilities reported that they have had disputes with attachers over interpretation of the NESC, particularly involving clearances.

The reality is that unauthorized or non-compliant pole attachments can and do cause accidents, and in fact a number of utilities reported accidents involving trucks snagging low-hanging communications lines. Clearances are particularly important for preventing electrocution; hence there is a 40 inch safety space between conductors and communications cables to protect communications workers from coming in contact with power lines. The cost of the safety space is borne exclusively by the utility, even though it is there to protect communications workers. Thus, the safety space is yet another hidden cost – along with unauthorized and non-compliant attachments and the accidents they can cause – that utilities incur from pole attachments.

Utilities also subsidize the cost of pole attachments through the regulated rate for CLECs and CATV, and this subsidy could be further extended to ILECs as well if the FCC grants USTA's petition. Currently, utilities on average only recover 16% of their per pole costs, based upon total pole attachment revenues divided by total pole costs and total number of poles. That percentage would drop substantially, if ILECs and/or CLECs are subject to a further reduced regulated rate. The impact on critical infrastructure reliability would be substantial, and it would affect both joint use and joint ownership arrangements. It would be doubly unfair to utilities if ILEC rates were regulated, because electric utilities would continue to pay ILECs a negotiated rate for attaching to ILEC poles, while ILECs would enjoy a lower regulated rate for attachments to electric utility poles.

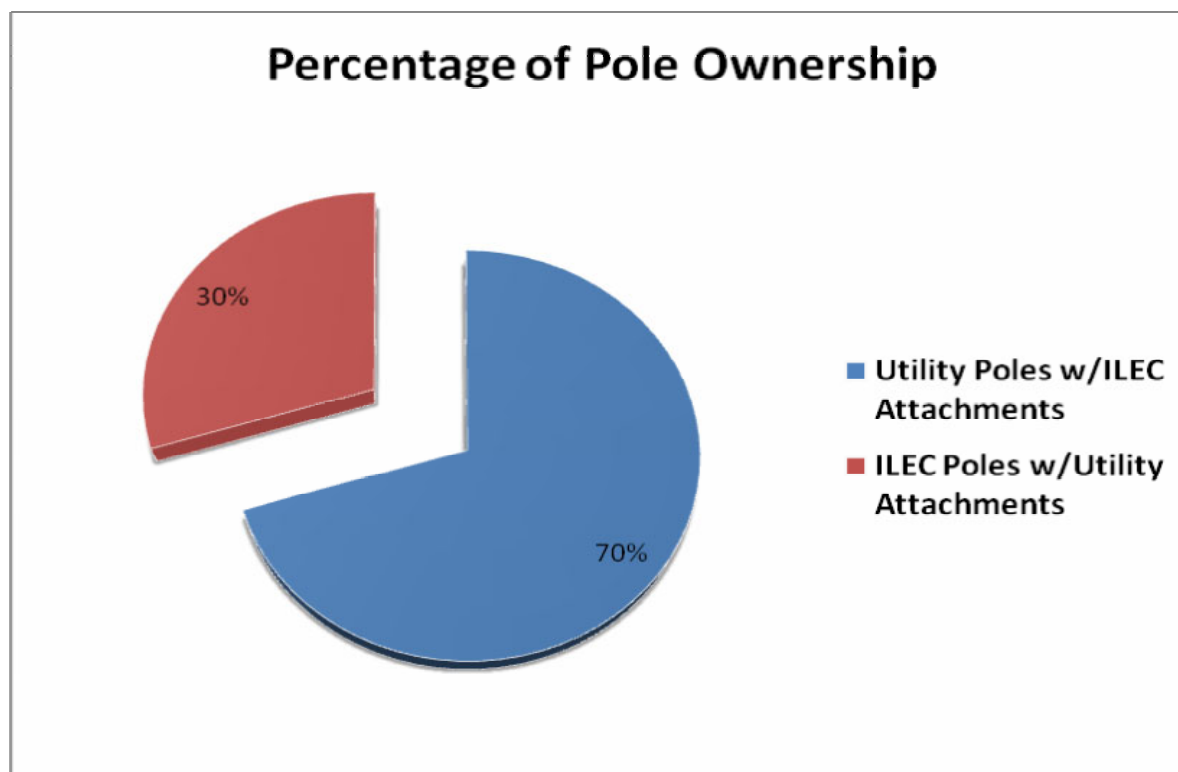
Instead of further eroding utility control of infrastructure, policymakers should ensure full recovery of pole attachment costs and protect infrastructure against practices and policies that would compromise reliability and security. While there has been plenty of anecdotal evidence of the toll on utility infrastructure from pole attachments, this whitepaper attempts to provide a comprehensive statistical analysis of the current state of pole attachments. It identifies the problems without necessarily making recommendations for solutions. Instead, the objective of this whitepaper is to point out the problems with pole attachments to provide context to the issues that are presently being considered in the FCC's Notice of Proposed Rulemaking.

Therefore, this report addresses several focus areas for pole attachments: 1) ILEC attachments; 2) CLEC and CATV Attachments; 3) Wireless Telecom and Wireless Broadband Attachments; 4) Processing of Pole Attachment Applications; 5) Engineering and Make Ready Practices; 6) Unauthorized Attachments, Code Violations and Surveys; 8) Safety and Reliability; and 9) Cost Recovery. The following sections describe each of these areas in further detail.

I. ILEC Attachments

As noted above, ILEC attachments are generally subject to joint-use agreements that are negotiated with electric utilities. In fact, approximately 92% of utilities responded that they have joint use agreements with ILECs. As the name implies, joint use agreements control the rates, terms and conditions by which electric utilities and ILECs use each others' infrastructure jointly. Most joint use agreements are old and are premised upon the percentage of pole ownership at the time they were written. Ideally, there is parity of ownership in which case all costs are shared equally and neither party must pay the other; but when there is disparity one party will owe the other for the balance of the costs.

UTC asked electric utilities to report the number of electric distribution poles with ILEC attachments, as well as the number of ILEC poles with electric attachments. Utilities reported a total of 7,945,722 utility poles with ILEC attachments, and 3,355,003 ILEC poles with utility attachments. That's more than twice as many utility poles with ILEC attachments as ILEC poles with utility attachments. Moreover, most utilities also reported that as an overall trend that the percentage of ILEC owned poles had declined over the last ten years.



Hence, the percentage of pole ownership has shifted over time with the ILEC share of joint use poles declining. Thus, cost sharing under joint use agreements has also shifted, with electric utilities bearing more of the costs. Because of this imbalance, ILECs must reimburse electric utilities for their increased costs under the joint use agreements. Otherwise, ILECs are avoiding costs for their attachments on utility poles that they would otherwise incur if ILECs owned those poles themselves. For example, if a joint use agreement was based on parity of poles when it was written years ago, today an ILEC would need to pay a utility 40% of the utility's pole costs to make up for the disparity in pole ownership (based on the 70/30% average reported by utilities in the UTC survey).

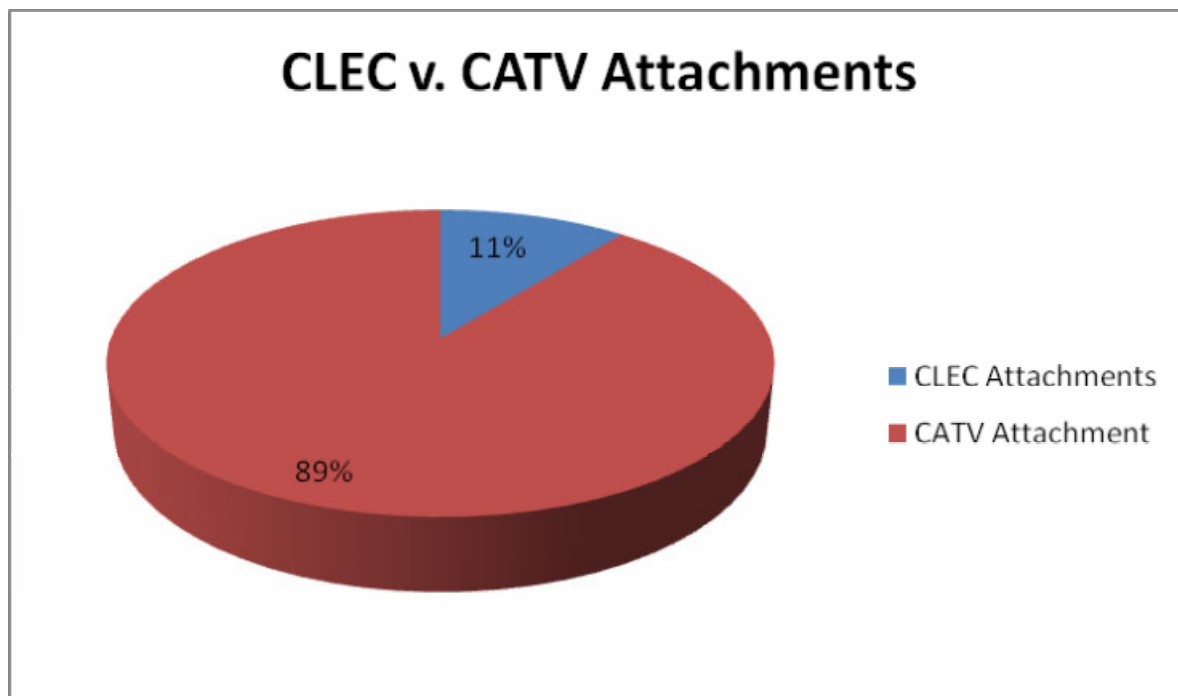
It is not clear how this disparity developed over time, and it is really irrelevant anyway. What is clear is that the bill for this disparity has come due for ILECs, and ILECs are seeking to avoid payment by asking the FCC to regulate the rate of their pole attachments on electric distribution poles. This would reward ILECs for ducking their share of costs that utilities have shouldered for years. Worse, it would pull the rug out from under critical infrastructure by replacing the negotiated joint use rate with a regulated cost-based rate that does not fully recover the actual costs of pole attachments. This would run contrary to various overarching public policies to invest in the safety, reliability and security of critical infrastructure. Finally, utilities would presumably continue to be subject to joint use agreements and would be liable to pay a negotiated rate to ILECs for electric attachments to ILEC poles, even though ILECs would be entitled to a regulated rate. Thus,

regulating ILEC rates would threaten critical infrastructure and further subsidize the communications industry at the expense of electric ratepayers and utility shareholders.

II. CLEC and CATV Attachments

Unlike ILEC attachments, CLEC and CATV attachments are entitled to access at regulated rates. Whereas the rate for CATV attachments recovers only the costs of the one foot of space the attachment presumptively occupies on the pole, the rate for CLEC attachments recovers the pro-rata share of two-thirds of the cost of the unusable space on the pole, as well. Thus, the CATV rate recovers 7.4% of the costs of a 35 foot pole and the CLEC rate recovers 16.9% of those costs. The CLEC rate was implemented in 1998 and phased in over five years, such that CLECs must now pay the full 16.9% of the cost of the pole.² Like the ILECs, the bill has come due and CLECs are asking the FCC to step in, claiming that the CLEC rate puts them at a competitive disadvantage.

UTC asked utilities to report the number of CLEC and CATV attachments on their electric distribution poles. The number of CATV attachments dwarfed the number of CLEC attachments. Utilities reported that they had a total of 1,374,956 CLEC attachments, and that they had 11,520,863 CATV attachments on their poles. That is almost nine times as many CATV attachments as CLEC attachments.



These numbers stand in stark contrast to the one of the basic assumptions going into the Telecommunications Act of 1996 – that CATV operators would offer telecom services in competition with carriers. To be sure, the reality has not played out as

² Assuming 3 attachments on a 37.5 foot pole, each telecom attacher would pay 16.9% of the pole costs, under the FCC's pole attachment rate.

expected, but the latest FCC Cable Competition Report show at least that by the end of 2004, cable telephony (both circuit-switched and IP) was available to 38 percent of the homes passed by cable television systems. Based on this percentage of cable telephony providers alone, it seems that there should be more pole attachments subject to the telecommunications rate. Meanwhile, the latest FCC Telephone Trends Report shows a steady increase in CLEC owned lines from nearly 2 million in 1999 to over 12 million in June 2006. Again, there should be more CLEC pole attachments considering the increase in CLEC-owned lines.

One possible explanation for this anomaly between this lack of CLEC attachments despite the growth of cable telephony and facilities-based CLECs is that CATV and/or CLECs are simply not telling utilities that they are offering telephone services or they are finding other ways of avoiding the CLEC rate. Note that the FCC rules do not require CATV providers to certify to utilities that they are not offering telephone services. Instead, the FCC relies on CATV operators to voluntarily notify utilities if and when they offer telephone services, or if and when they allow third party telecom providers to overlash their CATV attachments. This creates a “don’t ask don’t tell” environment, which may actually encourage a “catch-me-if-you-can” mentality among attachers. And in fact there have been anecdotal reports of this kind of gamesmanship by attachers, where they claim that the CLEC rate should only apply to the lone attachment on the pole outside a telephone subscriber’s home – and not all of the attachments necessary to route the traffic to and from the customer premises.

III. Wireless Telecom and Wireless Broadband Attachments

A small but important portion of pole attachments are made up of wireless telecommunications and wireless broadband attachments. The FCC has made clear that wireless telecommunications attachments are subject to Section 224 pole attachment regulation, although it has not established a particular rate formula for wireless telecommunications attachments. This may be due in part to the fact that wireless telecommunications attachments come in many shapes and sizes and can be placed on various places on poles and street lamps. As such, wireless telecommunications attachments tend to be unique and specialized and require associated equipment, such as cabinets that are also mounted on the poles along with the antenna. Meanwhile, wireless broadband attachments such as Wi-Fi and Wi-MAX are also gaining access to utility poles through negotiated agreements. These attachments are also unique and raise certain issues with regard to clearances, loading and power consumption.

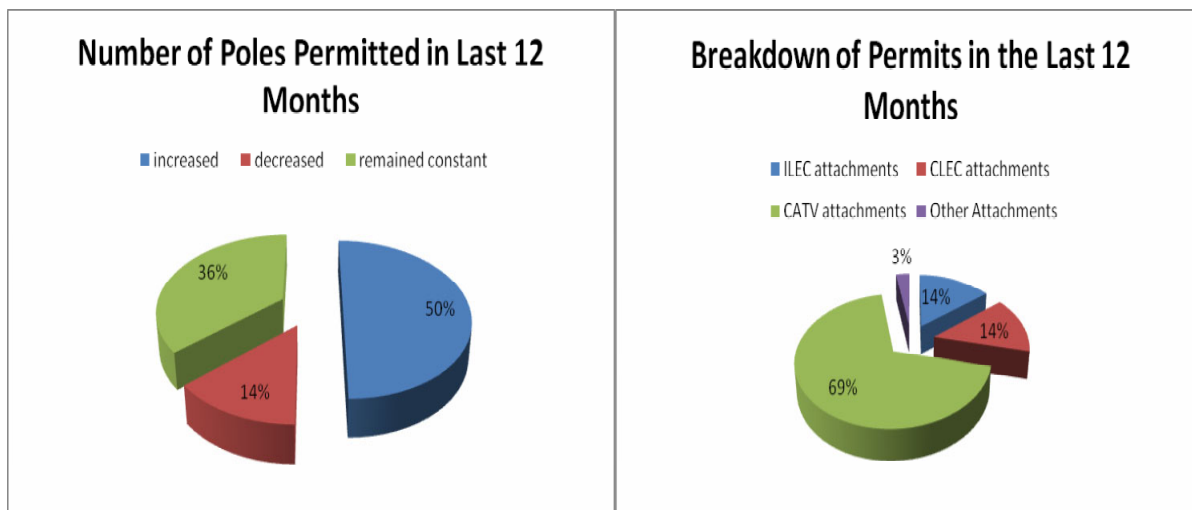
UTC asked utilities to report on the relative percentage of wireless telecom and wireless broadband attachments. Twenty-two of the 51 utilities responding regarding wireless telecom reported that they do have pole attachment agreements with wireless telecommunications service providers. Meanwhile, 18 of the 58

utilities responding regard wireless broadband reported that they have pole attachment agreements with wireless broadband service providers. Although, the actual number of wireless telecom (865) and wireless broadband (951) attachments was small and varied significantly between utilities, the relative percentage for either category of attachment overall was almost evenly split.

These statistics show that utilities do provide access for wireless attachments whether they are regulated or not. But, wireless attachments make up a very small portion of pole attachments in general. Of course, fewer wireless than wireline attachments are needed to serve a given area, but the number of attachments is also small because most wireless providers prefer to mount their equipment on taller structures, such as towers and buildings, to provide wider coverage. Wireless attachments on distribution poles are typically reserved for microcells and mesh networks, which cover smaller areas. These characteristics help to explain the relatively small number of wireless telecom and broadband attachments.

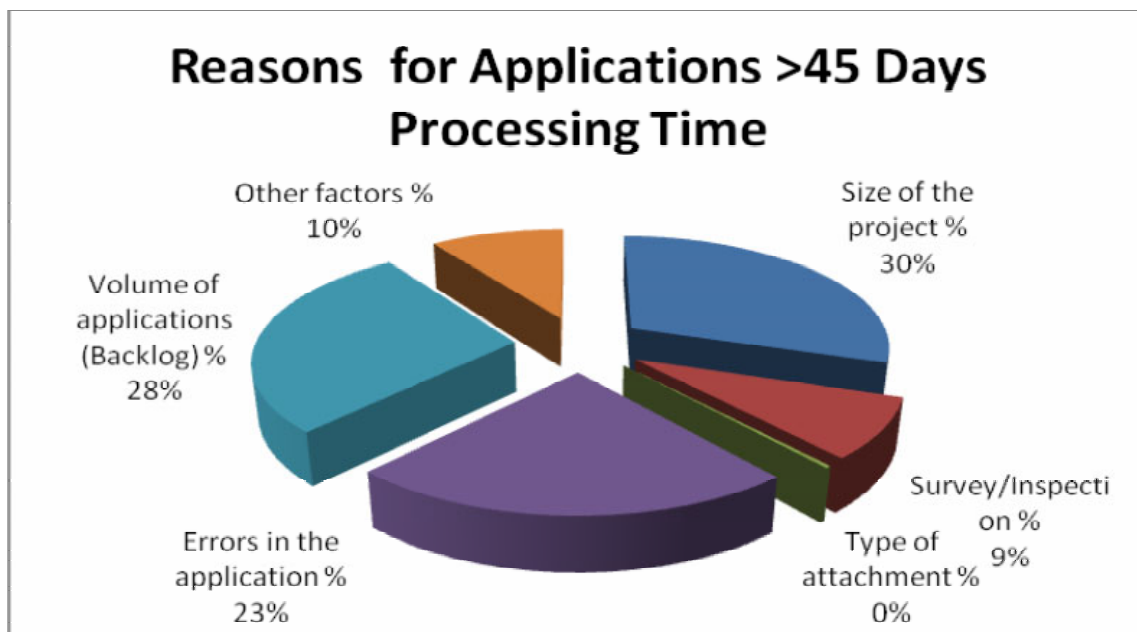
IV. Processing of Pole Attachment Applications

Generally pole attachments require the filing of an application for a permit with the utility. Utilities reported that they had permitted a total of 202,328 poles over the last year, and that the number of permits had increased in the last year – on average 40%. The vast majority of permits were for cable attachments, with the remainder almost evenly split between ILEC attachments and CLEC attachments.

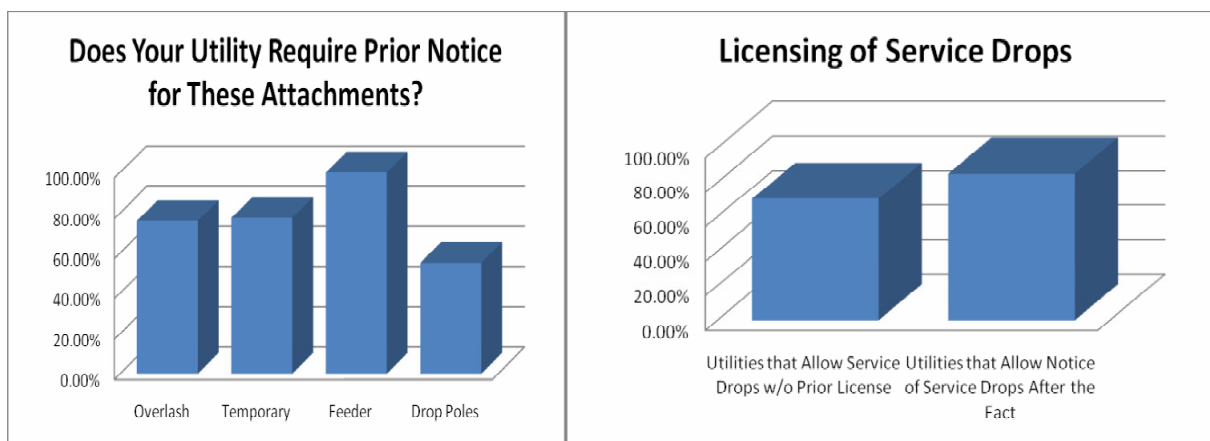


Under the FCC rules, an application must be approved or denied in writing within 45 days from the date that it is filed with the utility. The typical process involves reviewing the proposal for completeness, conducting a field survey, conducting an engineering analysis (load and clearance), estimating make ready and construction costs, submitting the estimate to the applicant and approving the attachment. Given these steps in the process, as well as the increasing number of permits from a

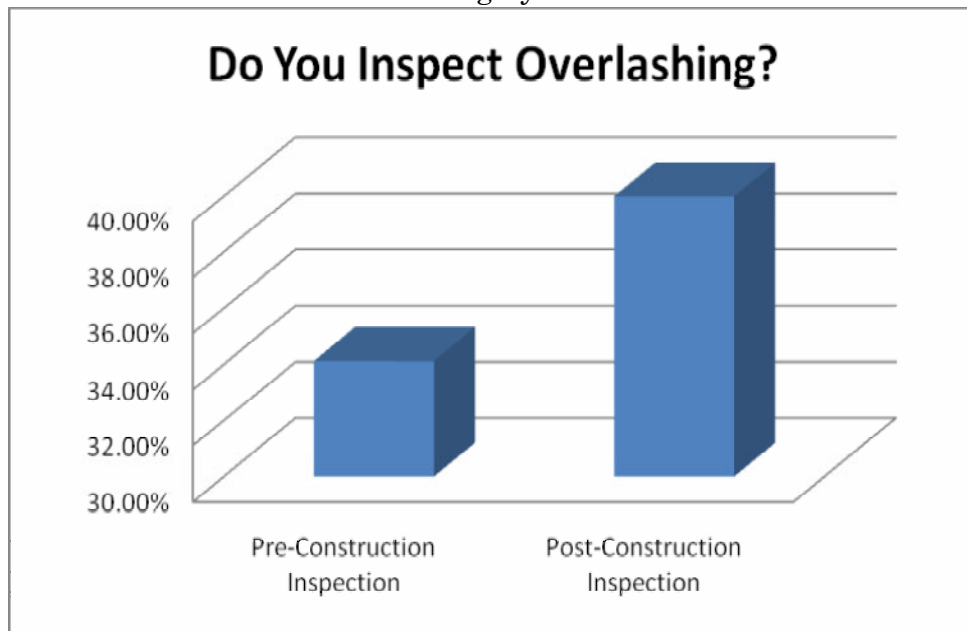
variety of attaching entities, utilities reported that approximately 19% of all applications on average take longer than 45 days to process an application for the following reasons as shown in the table below.



Ninety-seven percent of utilities reported that they at least require prior notice of attachments. Specifically, UTC asked which attachments required prior notice, including feeders, drop poles, overlash and temporary attachments. The table below shows the percentage of utilities that do require prior notice of these attachments. However, some utilities also reported that they do allow licensees to make attachments to drop poles without prior licensing. Even in those cases though, the utilities typically require that the licensee provide notice of service drops within 30 days after the attachment is made.

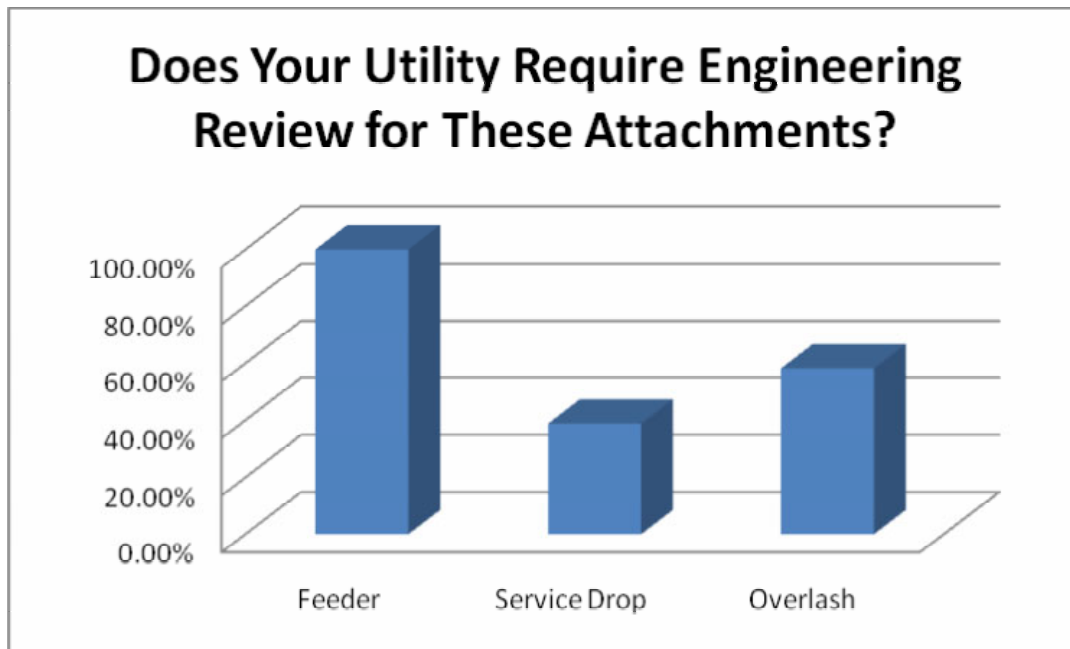


Similarly, utilities insist on prior notice of overloading, even though the FCC has flatly refused to require licensing of overloading. Utilities are concerned that uncontrolled overloading could overload poles. When they are notified of overloading, many utilities reported that they conduct pre- and post-construction inspections in order to ensure that the overloading is performed according to specifications and in compliance with code. Unfortunately, utilities reported that actual notification of overloading by licensees is not the norm.



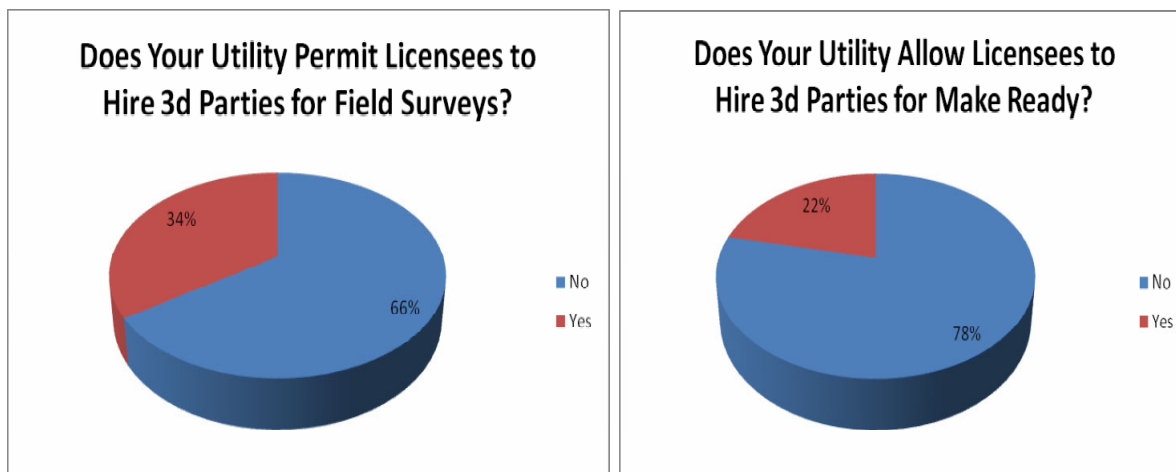
V. Engineering and Make Ready Practices

As part of the permitting process, utilities typically conduct engineering review of pole attachment requests to determine if the request can be accommodated or if make ready is required. UTC asked utilities which types of attachments require an engineering review when utilities receive a new attachment request. The chart below confirms that most utilities conduct an engineering review, particularly for attachments to feeders.



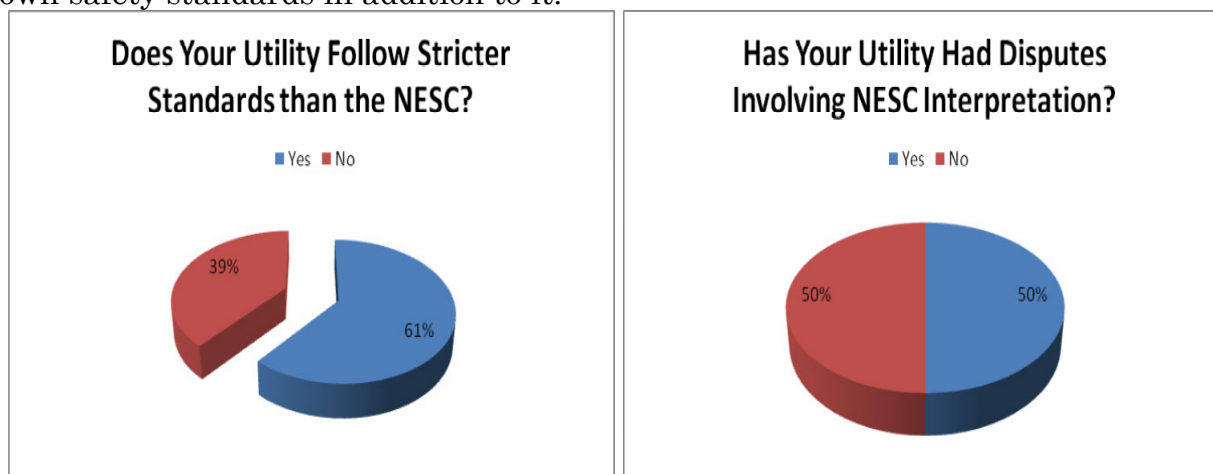
In fact, utilities reported that they had conducted engineering review of a total of 600,887 poles in the last year at a cost of \$5 million (or \$200,000 per utility on average). And while 70% of the time engineering reviews found that no make ready was required (i.e. OK to attach), utilities reported on average that 22% of the time, engineering review found that make ready was required to accommodate a new attachment request.

UTC also asked utilities whether they allow attaching entities to hire third party workers to perform field surveys and make ready. The chart below confirms that most utilities do not allow attaching entities to hire third parties to conduct make ready and field surveys. While utilities may allow third parties to perform this work, most prefer to hire the contractor themselves. Alternatively, some utilities prefer to use their own workers to perform make ready and field surveys, rather than to use third parties at all. To the extent that utilities did report that they allow third parties to perform field surveys and make ready, most emphasized that attaching entities were required to hire utility-approved contractors. Other utilities reported that they only allowed this on particularly large projects. Given the importance of engineering review and make ready for the integrity of critical infrastructure, utilities prefer to maintain control over the process rather than allow licensees to hire third-party workers to review poles and decide whether make ready is needed to accommodate attachments.



Note that the FCC does require investor-owned utilities to allow third parties to make pole attachments, and Fibertech has asked the FCC to expand that rule so that third parties must be allowed to perform make ready and field surveys. UTC/EEI objected that allowing third parties to perform make ready is distinctly different and could as a practical matter negate a utility's right to approve or deny attachments.

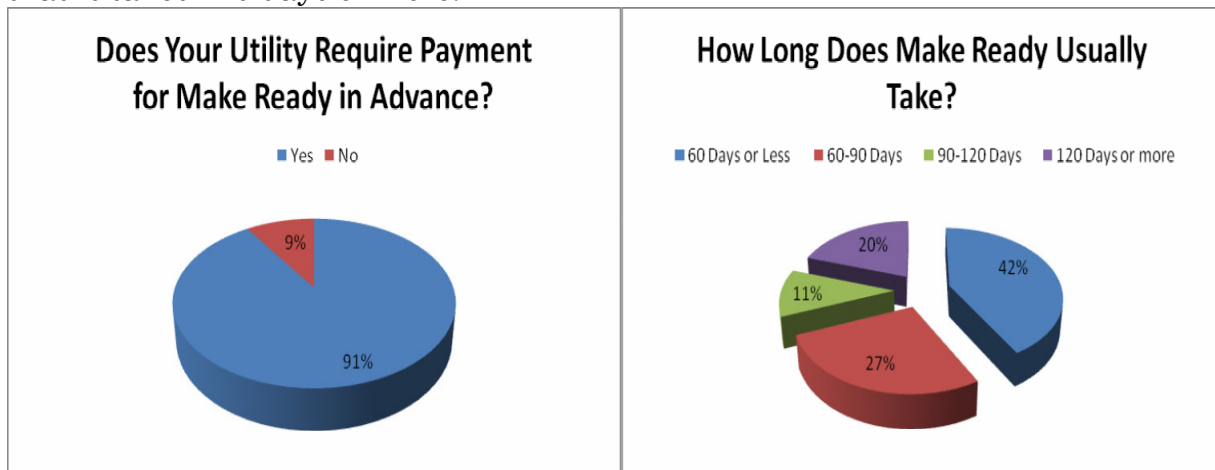
On that note, it is important to underscore that utilities follow their own safety standards in addition to the NESC. They also may be subject to federal and state safety standards that apply to pole attachments. The majority of utilities reported that these standards are stricter than the NESC. Thus, the NESC sets minimum standards for pole attachments. It is not a specification, and utilities follow their own safety standards in addition to it.



Moreover, half the utilities reported that they have had disputes with attachers over interpretation of the NESC. For example, a common dispute reported by utilities involved clearances, particularly the 40" communications worker safety space. The NESC specifies that the safety space should be 40" between the uppermost communications line and the lowest electric conductor. It also specifies

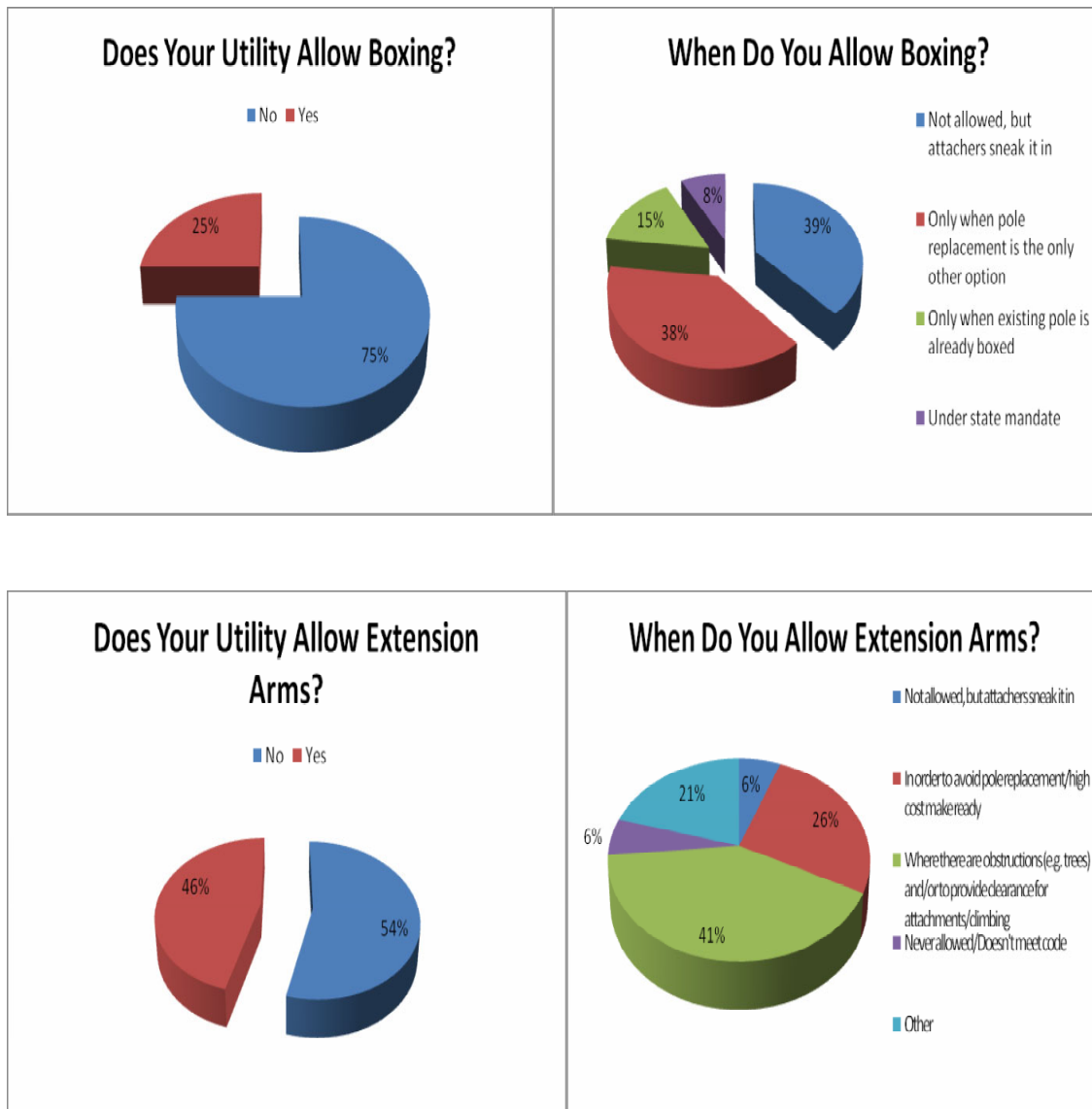
that the safety space may be 30” in limited situations, and attachers have argued that utilities should allow 30” instead of 40” for the safety space. Ironically, this would provide less protection against electrocution to attachers’ own communications workers. This illustrates how the NESC can be subject to interpretation, and how utilities and attachers tend to differ on issues of cost and safety. It also illustrates why utilities need to maintain control over engineering surveys and make ready in order to ensure that their safety standards are followed.

If engineering review determines that make ready is necessary to accommodate a pole attachment request, the utility draws up an estimate of the costs and submits it to the attacher for approval. If the attacher agrees to the estimate, most utilities reported that they require payment of the estimated costs in advance of the work. Make ready is expensive and almost all utilities require payment of make ready upfront. In fact, utilities reported that they spent on average \$262,827 on make ready last year. Perhaps because they do tend to require payment upfront for make ready, utilities generally reported a relatively low percentage of unrecovered make ready costs (4%) compared to unrecovered field engineering costs (14%) last year. Make ready also takes time. Although most utilities reported that it usually takes 60 days or less, 27% reported that it usually takes 60-90 days and 20% reported that it takes 120 days or more.



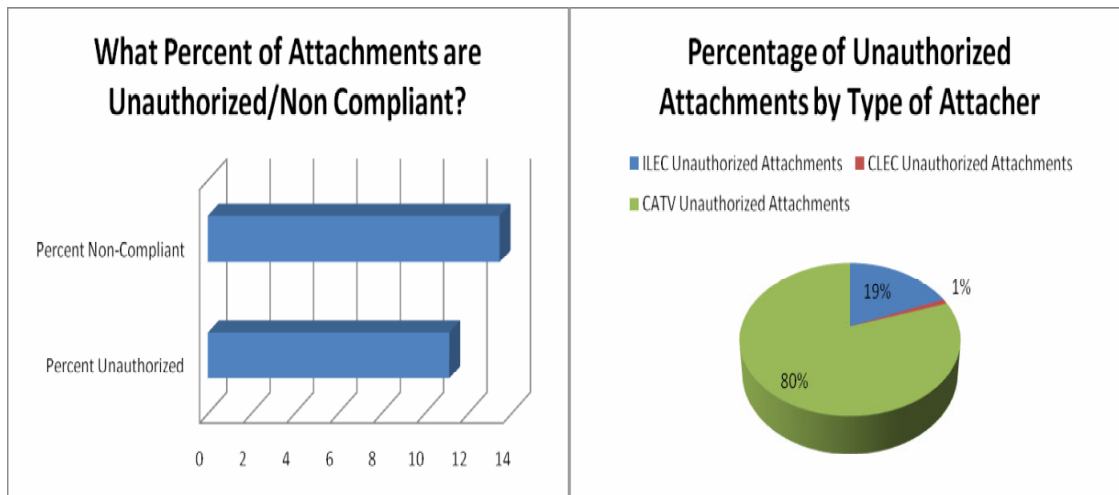
In order to accommodate attachment requests, utilities will consider alternatives to make ready on a case-by-case basis. For example, utilities generally reported that they do not allow attachers to use boxing or extension arms. Boxing refers to attaching communications cables on both sides of a pole instead of just one side. Boxing can create loading and climbing issues, and it makes it harder to change out a pole because the pole is surrounded on both sides by communications cables. Similarly, extension arms effectively create more space on the pole, but it raises concerns about clearances and loading on the extension arm. Still, some utilities reported that they do allow boxing and extension arms under certain circumstances, as shown in the tables below. One of the main reasons was to avoid changing out a pole, an expensive and time consuming proposition for attachers. This illustrates

that utilities do accommodate pole attachments by allowing alternatives to make ready on a case-by-case basis, provided that the attachment can be made safely.

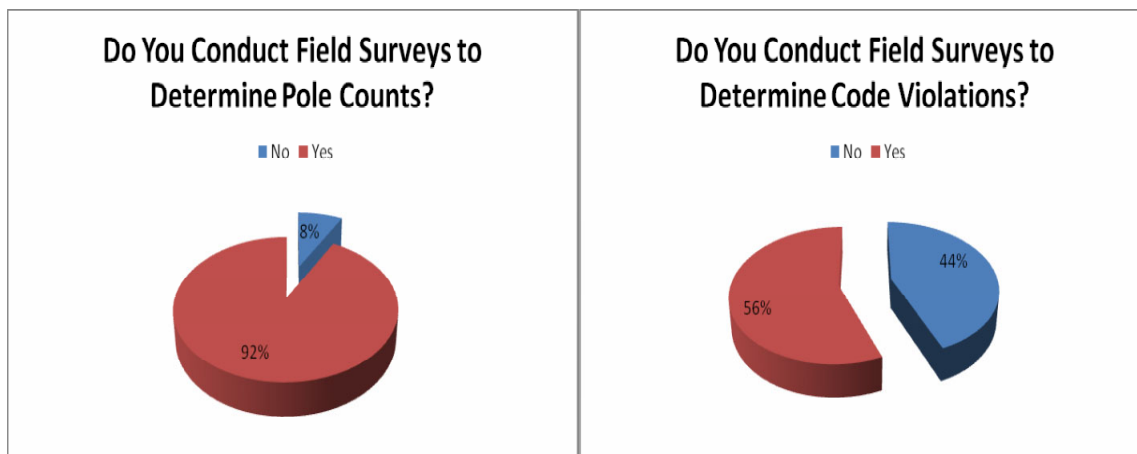


VI. Unauthorized Attachments, Code Violations and Surveys

Unfortunately, utilities are finding that many pole attachments are unauthorized and/or in violation of code. Utilities reported on average more than 11% of all attachments are unauthorized and more than 13% are in violation of code. By far most of those unauthorized attachments were by CATV operators, although in fairness most attachments are by CATV operators and the CATV operators have been attached longer than their CLEC counterparts. Stated another way, there may be more unauthorized attachments by CLECs that just haven't been caught yet.



These unauthorized and non-compliant attachments are usually discovered during surveys for pole counts and code violations. Ninety-two percent of utilities responding reported that they conduct field surveys to determine pole counts; and a smaller percentage (56%) reported that they conduct field surveys to determine code violations. Utilities also reported that these surveys are often conducted on a regular 5-year or 3-year cycle. This trend reflects the fact that utilities are increasingly concerned about the number of unauthorized and non-compliant attachments that they are finding during field surveys.



They aren't the only ones that are concerned either – states are getting concerned too. In 2004, New York ordered utilities and attachers to conduct ongoing joint surveys to determine pole counts and code violations. Each year, they must survey 20% of their service territory and the costs of the survey are shared jointly between the utility and the attachers. In 1999, Oregon imposed statutory penalties for unauthorized and non-compliant attachments, and these sanctions were revised in 2006 and 2007. Interestingly, utilities in these states are reporting that they are discovering or have discovered unauthorized attachments rates of 25-30%. This

raises the question: how many more unauthorized attachments would other utilities discover if their states took action the way that New York and Oregon have? Unauthorized and non-compliant attachments are yet another form of hidden costs from pole attachments. Not only are unauthorized attachments a hidden cost in the literal sense in terms of lost revenue, but they as well as non-compliant attachments create additional load on the poles, which can (and has) caused poles to snap. Conversely for attachers, they save money both in terms of rent and often avoided make ready. Moreover, the FCC has encouraged this behavior by rejecting contractual penalties for unauthorized attachments and code violations in several pole attachment complaint cases. Under FCC jurisprudence, the most that utilities can hope to recover is back rent for up to five years. Restitution does little to deter licensees from making unauthorized attachments, and offers little incentive for utilities to conduct costly surveys to catch them.

VII. Safety and Reliability

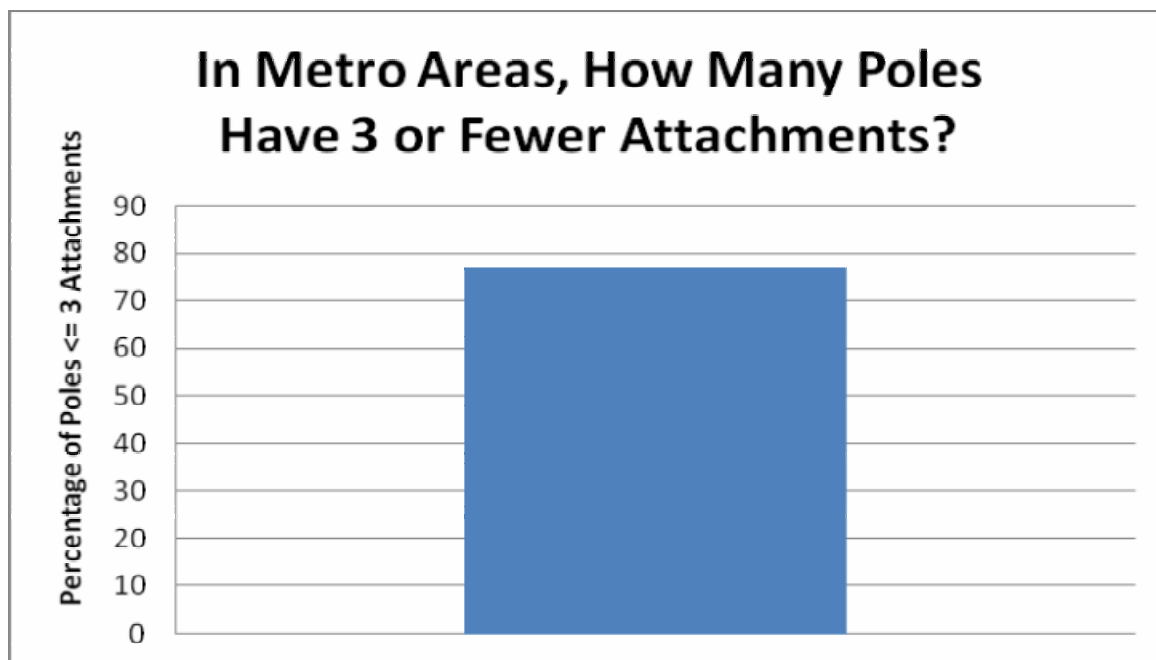
Unauthorized and non-compliant attachments threaten the safety of linemen as well as the general public. They also undermine critical infrastructure. Although utilities do not generally track statistics on pole attachment related accidents, they did report numerous incidents that highlight the impact on critical infrastructure and public safety. A common refrain from utilities involved accidents from inadequate clearances. For example, one utility reported several incidents where low hanging attachments were snagged by trucks, including one incident at a middle school in which the truck pulled down a cross arm and other equipment off the pole. These kinds of accidents illustrate the need to license pole attachments and to conduct engineering surveys, make ready if necessary, and pre- and post construction inspections. Moreover, attachers should be required to at least provide prior notice of pole attachments, including drop poles, overlashing and temporary attachments. Finally, rules without enforcement are meaningless: the FCC has been too lax on overlashing and drop poles, relying entirely on attachers to provide notice to utilities of these attachments and failing to penalize them when they don't.

With that as background and turning to Fibertech's so-called "best practices", utilities are understandably concerned that the FCC may impose bright line rules to require these practices in all cases, rather than to consider these practices on a case-by-case basis. For example, requiring electric utilities to provide unsupervised access into their conduit to determine capacity and to make attachments would be extremely risky. Attachers would be working in close proximity with power lines and would be at increased risk of electrocution. UTC asked utilities whether they ever permit such unsupervised access, and almost all responded no, generally citing safety concerns. The only exceptions reported were if access was to non-electric conduit and if access was provided to a utility-approved contractor with prior authorization from the utility. Moreover, utilities reported that they have very little underground pole attachments, and this may be an indication that attachers

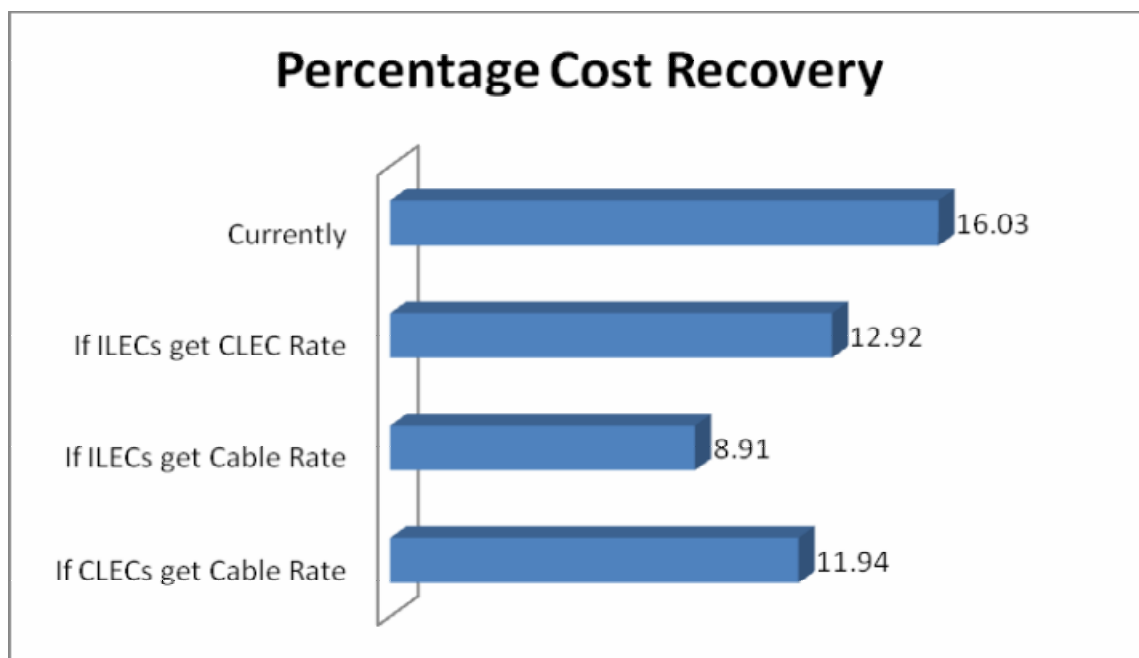
prefer to access non-electric (i.e. telephone) underground conduit. In any event, these safety concerns underline the need to protect critical infrastructure against so-called best practices that are neither “best” for safety nor “practices” among the electric utility industry generally.

VIII. Cost Recovery

While unauthorized and non-compliant attachments represent some of the hidden costs of pole attachments, the FCC regulated rate for both telecommunications and cable television attachments is a very apparent and direct subsidy of the communications industry at the expense of the electric industry and its ratepayers. The cable rate only recovers the costs associated with the space on the pole that is actually occupied by the attachment; and it subsidizes the cable industry by excluding any other costs associated with the rest of the pole. Thus, the cable rate recovers only 7.4% of the fully depreciated cost of the pole. The telecommunications rate is better because it recovers some of the unusable space costs, but it still subsidizes CLECs by only recovering 2/3rds of those unusable space costs and by adopting presumptions that are designed to further discount the CLEC rate. Thus, if there are 3 attaching entities on a 37.5 foot pole, the telecommunications rate recovers only 16.9% of the costs of the pole. The FCC presumptions further discount the rate by overestimating the number of attaching entities. For example, in urban areas, the FCC presumes that there are 5 attaching entities on each pole; but utilities reported to UTC that 76% of their poles in metro areas have 3 or fewer attaching entities.



UTC asked utilities to calculate their current cost recovery for joint use poles based on their total gross pole revenues divided by their total joint use pole costs on a per pole basis. Utilities reported on average that they recover approximately 16.03% of their overall pole costs from pole attachments. UTC also asked utilities to calculate their estimated cost recovery if the ILECs received either the cable rate or the telecommunications rate. As the table below shows, on average utilities would recover almost 25% less if ILECs received the CLEC rate and almost 50% less if ILECs received the CATV rate. Finally, UTC asked utilities to calculate their estimated cost recovery if CLECs received the cable rate. As the table below shows, on average overall pole recovery would drop more than 25% from its current levels.



This data shows that utilities recover a fraction of their joint use pole costs through pole attachment rent. The rental rate should not be further reduced as proposed by USTA and Time Warner Telecom. This would further subsidize the communications industry. Moreover, it would remove financial support for critical infrastructure. It should be noted that for investor-owned utilities, pole attachment revenues are usually rolled back into the rate base; they do not go to shareholders. It should also be noted that if pole attachment revenues are reduced by the FCC and more costs are shifted to utilities, those costs cannot be quickly passed along to electric ratepayers. These additional costs would need to be included in the next rate case before the state public utility commission, which occur infrequently and can be years away from completion.

In addition, if ILECs were to receive a regulated rate, it would throw joint use agreements into uncertainty with regard to fees that electric utilities would owe ILECs for attachments to ILEC-owned poles. In short, electric utilities could be

subject to a joint use rate, while ILECs would be subject to a regulated rate. This would widen the gap between revenue and expenses for cost recovery by electric utilities for pole attachments. Thus, USTA's proposal to shift to regulated rates for ILEC attachments is ill considered and unfair on multiple levels.

IX. Conclusion

The survey shows that pole attachments pose a significant burden on utility infrastructure already, and that the pending petitions by Fibertech and USTA as well as the whitepaper by Time Warner Telecom would only worsen the situation by further diminishing utility control of their infrastructure and undermining the basis for cost recovery that is mutually negotiated through joint use agreements.

- There are far more ILEC attachments to utility poles than utility attachments to ILEC poles
- Practically all the regulated attachments are CATV attachments that receive the lowest rate under the FCC rules.
- Utilities must process a variety of types and sizes of pole attachment applications within 45-day timeframes, and most of the time when they fail to meet these timeframes, it is because there is some problem with the application or other reason beyond the control of the utility.
- As a reflection of their due diligence in processing applications, most utilities routinely conduct field engineering, and they generally do not use third-party contractors to do make ready or field surveys.
- Although most attachers seek a permit before attaching, many do not, and FCC policies do not discourage attachers from making unauthorized attachments.
- Utilities conduct field inventories and catch thousands of unauthorized attachments and NESC violations each year.
- Many attachment requests require "make ready" because of NESC violations or other reasons.
- Pole attachments have caused accidents, particularly with trucks snagging low-hanging communications lines and pulling down poles.
- Overlashing, boxing and extension arms create loading and climbing hazards; and utilities should be allowed to decide whether to allow these practices on a case-by-case basis.
- Regulated rates for ILECs would cut cost-recovery by almost fifty percent and throw joint-use cost-sharing out of balance, threatening the integrity of critical infrastructure.

UTC believes that the pole attachment rules need to be better balanced between the interests of electric utilities and attachers in order to protect critical infrastructure and to eliminate subsidies for the communications industry. The current regulations systematically shortchange utilities and grant access rights that jeopardize safety and reliability. UTC looks forward to working with policymakers

to remedy this unfair and dangerous imbalance in order to prevent further subsidization of the communications industry and to ensure the safety, reliability and security of the nation's utility systems.